



## Articles

# An Investigation of Demographic Correlates of the Celebrity Attitude Scale

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## Abstract

The Celebrity Attitude Scale (CAS) has been widely used in the last 15 years, but little is known about how ethnicity and socioeconomic status relate to scores on this scale. In the first of two studies, we showed that a sample of African-American college students had more favorable attitudes toward their favorite celebrities than a sample of White college students. However, there was no control for the possibility that the two samples were unequal with respect to socioeconomic status. The second study controlled for that possibility, and added samples of Hispanic and Asian college students. Results showed that African-American participants again had more favorable attitudes toward their favorite celebrities than Whites did, with Hispanic and Asian-American participants falling in between the two extremes. Socioeconomic status was unrelated to CAS scores. African-Americans tended to select African-American celebrities as their favorites, and Whites tended to choose Whites, with Hispanic and Asian-Americans showing no ethnic preferences. Strength of identification with one's ethnic group was unrelated to ethnic concordance in choosing a favorite celebrity, but strength of identification with one's ethnic group decreased as favorable attitudes toward one's favorite celebrity increased. We discussed why African-American participants might report more attachment to their favorite celebrities than White participants.

**Keywords:** celebrity attitudes, Celebrity Attitude Scale, ethnic differences, socioeconomic status, ethnic identification

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A celebrity can be described as any living person who is famous for virtually any reason. The *Celebrity Attitude Scale* was developed to measure the strength of one's attraction to a favorite celebrity (CAS; McCutcheon, Lange, & Houran, 2002). Several studies based on the Celebrity Attitude Scale (Maltby, Houran, Lange, Ashe, & McCutcheon, 2002; Maltby, McCutcheon, Ashe, & Houran, 2001; McCutcheon et al., 2002) suggest that there are three increasingly more extreme sets of attitudes and behaviors associated with celebrity worship. Low levels of celebrity worship have *Entertainment-social* value and are reflected in agreement with items like "My friends and I like to discuss what my favorite celebrity has done," A second level of celebrity worship is characterized by more *Intense-personal* feelings, defined by items like "I have frequent thoughts about my celebrity, even when I don't want to." This level reflects individuals' intense and compulsive feelings about the celebrity, similar to the obsessional tendencies of fans often referred to in the literature (Dietz et al., 1991). The most extreme expression of celebrity worship is labeled *Borderline-pathological*. It is shown in items like: "If I were lucky enough to meet my favorite celebrity, and he/she asked me to do something illegal as a favor I would probably do it." This third level is believed to reflect an individual's borderline pathological attitudes and behaviors toward a favorite celebrity.

McCutcheon et al. (2002) offered an “Absorption-Addiction” model to explain celebrity worship. According to this model, a weak identity in some individuals facilitates psychological absorption with a celebrity in an attempt to strengthen identity and a sense of fulfillment. The absorption can take on an addictive component in some persons, leading to more extreme behaviors to sustain the individual’s satisfaction with one’s favorite celebrity.

There are currently more than 40 published studies in the psychology literature in which the CAS was used, and much is known about the attitudes and behaviors of those who greatly admire their favorite celebrity. However, surprisingly little is known about the role that ethnicity plays in shaping one’s attitudes about celebrities. McCutcheon, Maltby, Houran, and Ashe (2004) reported the results of a pilot study in which 99 White, Black and Hispanic males from a university in central Florida were compared on CAS scores and related measures. Black participants averaged about three points higher on total CAS scores compared to Hispanics, who were about three points higher than Whites. However, due to large standard deviations, these differences did not approach statistical significance. Asked about their general interest in celebrities, results for the three groups were virtually identical. The only significant difference was the choice of the favorite celebrity’s racial or ethnic identity. Black participants selected Black celebrities as their favorites 81% of the time, White participants chose White celebrities 73% of the time, while Hispanics chose White celebrities 60% of the time and Black celebrities 25% of the time. The authors tentatively concluded that participants’ ethnicity is unrelated to CAS scores and to general interest in celebrities. It is quite likely that these largely null findings early on in the research on ethnic differences in the CAS discouraged further efforts in this direction.

However, much more recently, as a byproduct of a study of attitudes toward celebrities and intimate relationships, McCutcheon, Gillen, Browne, Murtagh, and Collisson (2016) found that non-Whites scored significantly higher than Whites on all three subscales of the CAS. Study 1 was an attempt to determine if perceived ethnicity (African-American vs. White) is a significant predictor of scores on the CAS. Study 2 replicates Study 1 with a broader sample, while also examining factors associated with ethnic differences (e.g., socioeconomic status and ethnic identity).

## Study 1

### Method

#### Participants

Participants were 145 students from one public, historically Black university located in Missouri, and two predominately White universities (one public, one private) located in Georgia. We asked participants for age ( $Mean = 20.50$ ,  $SD = 4.45$ ), gender (90 women and 55 men), and ethnicity (71 Whites, 57 African Americans, 3 Hispanics, 4 Asians, and 10 other ethnicities). We selected the two largest ethnic groups for comparison on the CAS and other variables relating to celebrity admiration.

#### Measures

The 23-item version of the *Celebrity Attitude Scale* (CAS) has been shown to have good psychometric properties over the course of several studies (for a review see McCutcheon et al., 2004). Responses on the CAS are on a 5-point scale with anchor points of “strongly agree” equal to 5 and “strongly disagree” equal to 1. The scale measures three dimensions of celebrity worship that were identified through factor analysis (McCutcheon et al., 2004). These three subscales address entertainment-social (ES; 10 items; e.g., “My friends and I like to discuss what my favorite

celebrity has done,”  $\alpha = .83$ ), intense-personal (IP; 9 items; e.g., “I have frequent thoughts about my favorite celebrity, even when I don’t want to,”  $\alpha = .89$ ), and borderline pathological (BP; 4 items; e.g., “I often feel compelled to learn the personal habits of my favorite celebrity,”  $\alpha = .72$ ) forms of celebrity worship. Across several studies, total scale Cronbach alphas ranged from .84 to .94 (McCutcheon et al., 2004). Cronbach’s alpha in the present study was .93.

## Procedure

Participants were told that they could discontinue the study at any time without penalty, in accordance with IRB policy at each institution where the study took place. All of the participants who agreed to participate completed the study. Participants filled out the scale in groups ranging in size from 22 to 47 in classrooms at their respective institutions.

## Results

We tested whether our African American subsample differed from our White subsample on the three subscales of the Celebrity Attitude Scale (CAS) using independent samples *t*-tests. African Americans scored significantly higher than White participants on the Intense-Personal (IP) and Borderline-Pathological (BP) subscales (see Table 1).

Table 1

*Descriptive Statistics Using Independent-Samples *t*-Tests for Equality of Means*

Scale	African American		White		<i>t</i>	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CAS-ES	22.82	6.93	21.14	7.04	-1.34	121
CAS-IP	21.71	8.39	15.14	6.80	-4.88**	107
CAS-BP	9.94	3.51	7.81	3.33	-3.49*	117
CAS- TOT	54.47	17.71	43.09	14.93	-4.45**	110

\* $p < .01$ . \*\* $p < .001$ .

## Discussion

It appears as though our sample of African-American university students has a stronger attachment to their favorite celebrity than their White peers. However, it may be the case that the two groups were not comparable with respect to socioeconomic (SES) variables. Given that the poverty rate for African Americans is about twice that of the White population in the United States (American Psychological Association, 2016), we wondered if some SES variables might be related to attitudes toward celebrities.

There is little known about the role of socioeconomic status in relation to attitudes about celebrities. Level of education is considered to be one of the major indicators of SES (Lindsey & Beach, 2004). In one study, amount of education was negatively correlated ( $-.40$ ) with CAS scores (McCutcheon et al., 2002). In another study, the authors found a correlation of  $-.32$  between amount of education and scores on the CAS (Maltby, Day, McCutcheon, Martin, & Cayanus, 2004). This latter relationship seems impressive in light of the fact that it was conducted on a subsample of 173 individuals who were 25 years or older, most of whom had presumably completed their education.

However, we are unaware of any research linking CAS scores with occupational prestige or family income, other pillars of the SES foundation (Lindsey & Beach, 2004). More recently, very high scores were obtained on the CAS by college students in the Philippines (Vega et al., 2013), and Jamaica (McCutcheon, Wong, Black, Maynard, Frey, & Rich, 2014), both relatively poor countries compared to the United States, as measured by their Human Development Index rankings (“List of countries by Human Development Index”, 2014). However, no SES data were collected on the participants themselves. Furthermore, all the Jamaican participants were Black, raising the possibility that ethnic group, SES, or some combination of the two, affected CAS scores.

## Study 2

Our second study was designed to expand on the first one, by attempting to determine if the ethnic difference found in Study 1 could be replicated. We predicted that Black participants would score significantly higher than White participants on CAS-IP & CAS-BP (Hypothesis 1). We also added Hispanic and Asian participants to the mix in order to find out how they compared to Whites and Blacks.

We also wished to see if Black participants would tend to choose Blacks as favorite celebrities and Whites would tend to choose Whites as favorite celebrities, as they did in a previous study (McCutcheon et al., 2004). Additionally, we wanted to know if the strength of one’s ethnic identity would be correlated with the choice of a favorite celebrity. A previous study revealed that participants who had a strong sense of ethnic identity responded more favorably to ads portraying a model who appeared to be from the same ethnic group as the participant, as opposed to ads portraying a model who appeared to be from a different ethnic group as the participant (Sierra, Hyman, & Torres, 2009). Accordingly, we hypothesized that Black participants would tend to choose Black favorite celebrities and Whites would tend to choose White favorite celebrities (Hypothesis 2), and as strength of ethnic identity increased, so would the tendency to choose an ethnically concordant person as a favorite celebrity (Hypothesis 3).

Finally, we wished to see how SES variables would relate to CAS scores. We predicted that a measure of SES would correlate negatively with all three subscales of the CAS. In other words, participants with higher SES scores would tend to have less admiration for a favorite celebrity (Hypothesis 4).

## Method

### Participants

Participants were 261 university students. Ninety-one students were from two universities (one public, one private) located in Georgia, 90 students were from one public, historically Black university in Missouri, and 80 students were from one public university in California. We measured participants’ self-reported age ( $Mean = 19.93$ ,  $SD = 4.04$ ), gender (182 women and 79 men), and ethnicity (87 Whites, 78 African Americans, 42 Hispanics, 30 Asians, and 24 other ethnicities).

### Measures

The same 23-item version of the *Celebrity Attitude Scale* (CAS) used in Study 1 was also used in Study 2. Cronbach’s alpha in the present study was .95.

We measured socioeconomic status (SES) using the *Hollingshead Two-Factor Index of Social Position* (Hollingshead, 1957). This index computes college student SES using the parents’/guardians’ educational attainment (7-

pt. scale) and occupational prestige (9-pt. scale). SES was computed by averaging both parents' scores on each scale, and then adding the resulting educational and occupational scores. The Hollingshead Index is commonly used in the field of sociology (Adams & Weakliem, 2011).

We also administered the five-item *Strength of Ethnic Identity Scale* (SEI), which was adapted from Phinney's (1992) scale of *Multigroup Ethnic Identification* (Sierra et al., 2009). Examples of items include "I feel a strong attachment towards my own ethnic group," and "I feel good about my cultural or ethnic background." Response options are on a 7-point Likert scale with 7 equal to "strongly agree" and 1 equal to "strongly disagree." Higher mean scores indicate a stronger sense of ethnic identification. All five items had factor loadings above .40, and Cronbach's alpha was reported as .71 (Sierra et al., 2009). Cronbach's alpha in the present study was .88.

## Procedure

The participants completed the survey online, which consisted of the *Strength of Ethnic Identity* (SEI) scale, followed by the *Hollingshead Two-Factor Index of Social Position* and the CAS and related celebrity items. Participants were told that they could discontinue the study at any point without penalty, in accordance with institutional IRB policies. All of the participants who agreed to participate completed the study.

## Results

For ethnic group comparisons, we excluded participants who identified as "other" ethnicity. A series of ANOVAs comparing African-Americans, Hispanics, Asian-Americans, and Whites generally confirmed our first hypothesis. Table 2 shows that African-Americans scored significantly higher than Whites on CAS – total, as well as two CAS subscales (ES and IP). Hispanics and Asian-Americans generally scored in between the two extremes set by African-Americans and Whites. We completed additional analyses to rule out the possibility that age or location accounted for these ethnic differences. ANOVA showed no significant differences in age between African American, Hispanic, Asian, or White students,  $F(3,230) = 1.89, p = .13$ . ANOVAs additionally showed that students from the four campuses did not differ significantly on the CAS –total,  $F(3,223) = 1.33, p = .27$ ; CAS-ES,  $F(3,230) = .14, p = .94$ ; CAS-IP,  $F(3,232) = 2.49, p = .06$ ; or the CAS-BP,  $F(3,231) = 1.23, p = .30$ .

Table 2

*Descriptive Statistics Using ANOVA Tests for Equality of Means*

Scale	African-American		Hispanic		Asian		White		df	F
	M	SD	M	SD	M	SD	M	SD		
CAS – Total	62.13	19.74	57.87	17.11	60.17	15.25	52.23	16.04	3, 223	4.50 <sup>a</sup>
CAS-ES	30.96	8.04	28.63	7.92	30.23	7.59	27.12	7.52	3, 230	3.51 <sup>a,b</sup>
CAS-IP	21.25	8.94	21.34	8.18	21.14	6.53	16.84	6.82	3, 232	5.85 <sup>a,c</sup>
CAS-BP	11.35	3.80	10.20	3.78	10.93	3.37	9.92	3.55	3, 231	2.28
SES (Hollingshead)	12.11	2.96	7.83	3.83	11.55	3.69	12.52	2.49	3, 230	23.70 <sup>a,d</sup>
Strength of Ethnic Identity (SEI)	6.30	0.74	6.13	0.90	6.20	0.91	5.57	0.95	3, 231	10.86 <sup>a,e</sup>

Note. See Appendix for actual items on the SEI.

<sup>a,b,c</sup>Tukey comparisons show that African Americans have significantly higher scores than Whites.

<sup>d</sup>Tukey comparisons show that Hispanics are significantly lower than all other groups.

<sup>e</sup>Tukey comparisons show that Whites differ significantly from all other ethnic groups.

\* $p < .01$ . \*\* $p < .001$ .

To test our second hypothesis, we first determined the perceived racial identity of each participant's favorite celebrity. Relevant data were missing from eight participants. Blacks chose Blacks as favorite celebrities 73% of the time, Whites chose White celebrities 90% of the time, but Hispanics (12%) and Asians (27%) tended to choose ethnically discordant celebrities. A goodness-of-fit Chi-square test was highly significant, Chi-square ( $N = 229$ ,  $df = 3$ ) = 97.72,  $p < .0001$ . Then we correlated strength of ethnic identification scores with ethnic group of one's favorite celebrity (same ethnic group = 2, different ethnic group = 1). Our results showed that the relationship between SEI scores and choice of ethnically concordant favorite celebrity was .04 ( $N = 247$ ,  $p = .52$ ). We repeated the correlational analysis for each ethnic group. For African-Americans the correlation was  $-.17$  ( $n = 71$ ,  $p = .15$ ). For Hispanics the correlation was  $-.28$  ( $n = 41$ ,  $p = .07$ ). For Asians the correlation was  $.07$  ( $n = 30$ ,  $p = .72$ ). For Whites the correlation was  $-.02$  ( $n = 84$ ,  $p = .83$ ). Thus, our third hypothesis was disconfirmed.

Our fourth hypothesis, that SES would correlate negatively with CAS subscale scores, resulted in correlation coefficients that were all extremely close to .00 (see Table 3). Thus, our fourth hypothesis was disconfirmed. Though we made no prediction about the outcome, Table 3 shows that SEI scores are negatively related to CAS total scores ( $r = -.22$ ,  $p < .001$ ).

Table 3

*Correlations Among All Measures Used in Study 2*

Scale	1	2	3	4	5	6
1. CAS-Total	—					
2. CAS-ES	.93**	—				
3. CAS-IP	.93**	.75**	—			
4. CAS-BP	.89**	.86**	.73**	—		
5. SES (Hollingshead)	.01	.06	-.02	.06	—	
6. Strength of Ethnic Identity (SEI)	-.22**	-.19*	-.25**	-.15*	-.08	—

\* $p < .01$ . \*\* $p < .001$ .

## Discussion

Our second study showed that African-Americans scored higher than Whites on CAS-Total as well as on two subscales (ES and IP), with Hispanics and Asian-Americans generally scoring in between. As predicted, Blacks and Whites tended to choose favorite celebrities from their own ethnic groups. On the other hand, Asian-Americans and Hispanics were much less likely to choose favorite celebrities from their own ethnic groups. One plausible explanation for this is that American culture provides relatively few Asian-American and Hispanic celebrities, thus limiting one's field of choices. Another possibility is that an ethnically discordant choice indicates an attempt to assimilate to the mainstream of American pop culture.

We correlated strength of ethnic identification scores with ethnic group of one's favorite celebrity. Our results showed that the relationship between ethnic identification and choice of ethnically concordant favorite celebrity was essentially zero. We repeated the correlational analysis for each ethnic group. For African-Americans and Hispanics the correlations approached significance, but for Asians and Whites the correlations were close to zero.



The hypothesis that SES would correlate negatively with the CAS and its subscale scores, resulted in correlation coefficients that were essentially zero. It appears that socioeconomic status, at least as measured by the *Hollingshead Two-Factor Index of Social Position*, is not a predictor of CAS scores.

An unexpected result from our second study was the significant correlations between SEI scores and the CAS and its subscales: Participants who reported a stronger ethnic identity tended to have weaker identification with their favorite celebrities, though none of the correlation coefficients exceeded  $-.25$ . The “Absorption-Addiction” model (McCutcheon et al., 2002) helps to explain these findings. According to this model, a weak identity facilitates psychological absorption with a celebrity in an attempt to strengthen identity and a sense of fulfillment. A stronger ethnic identity might be indicative of a stronger identity in general, which, according to the model, should result in a lowered tendency to worship celebrities.

## General Discussion

Our results indicate that the scores we obtained online are consistent with scores from previous studies in which participants filled out the same scales on paper. For example, the Cronbach alphas we obtained in both studies on the CAS-Total (.93 & .95) are similar to Cronbach alphas obtained in previous studies (McCutcheon et al., 2004). Previous studies also typically show higher mean scores on CAS-ES, as compared to CAS-IP and CAS-BP (e.g., McCutcheon, Griffith, Aruguete, & Haight, 2012; McCutcheon, Lowinger, Wong, & Jenkins, 2013; McCutcheon et al., 2014), just as occurred in the present studies. Furthermore, the total mean CAS scores in the present study for White American college students were quite similar to total mean CAS scores for previous studies of American college students in which the large majority of the students were White (Griffith, Aruguete, Edman, Green, & McCutcheon, 2013; McCutcheon et al., 2004). These similarities suggest that our participants took the two studies seriously.

Our main finding is that, in both studies, African-Americans tended to score higher than Whites on the CAS. In other words, they tended to be more strongly attracted to their favorite celebrities than Whites were. This was especially true on the CAS Intense/personal subscale (“The successes of my favorite celebrity are my successes also,” and “When something good happens to my favorite celebrity I feel like it happened to me”). How can we account for this? One possibility is that African-Americans identify more strongly with their favorite celebrities because it provides a temporary mental escape from the unpleasant reality of being a member of a minority group in a society that does not fully accept African-Americans. A tendency toward cognitive escape into the entertainment world of celebrities might be manifested as a preference for fantasy. Research has shown that high CAS scorers also tend to be fantasy prone (Maltby, Day, McCutcheon, Houran, & Ashe, 2006). If African-Americans identify more strongly with their favorite celebrities because it provides a temporary mental escape from reality, we might expect fantasy proneness to manifest itself in other ways beside a strong attachment to a celebrity. Further research should investigate ethnic differences in fantasy proneness and its correlates.

An alternative to the “temporary mental escape” hypothesis stems from social identity theory. According to this theory, we identify with our in-groups and gain self-esteem in doing so (Myers, 2004). Using the *Implicit Association Test*, researchers showed that both African-Americans and Whites tended to associate negative words like “cancer,” and “bomb” with African Americans (Dasgupta, McGhee, Greenwald, & Banaji, 2000). In the face of prejudice from the dominant group and the internalization of oppression, perhaps many Black Americans derive a self-esteem

boost from a strong identification with a Black celebrity. Further research should examine the correlation between self-esteem and celebrity attraction in African American samples.

One limitation of our studies is the reliance on college student samples with mean ages of about 20 years. A few studies show that older participants tend to score slightly lower on the CAS (e.g. Ashe & McCutcheon, 2001; Maltby, Houran, & McCutcheon, 2003). Our ability to generalize to older, non-student populations is limited. A second limitation is the possibility that a measure of socioeconomic status other than the *Hollingshead Two-Factor Index of Social Position* might yield a stronger link between socioeconomic status and the CAS. Third, generalization of our results ends at the borders of the United States. Finally, we did not counterbalance the presentation of the scales we used in study two, leaving open the possibility of an order effect. Replication of our results using a different SES measure, in countries other than the United States, and with an older, less well-educated sample is recommended.

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## Competing Interests

The authors have declared that no competing interests exist.

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### Appendix: Strength of Ethnic Identity (SEI)

Use the numbers from the following scale to best describe how much you agree or disagree with statements about your ethnic group for each of the 5 items below.

(7)Strongly Agree	(6)Agree	(5)Slightly Agree	(4)Uncertain	(3)Slightly Disagree	(2)Disagree	(1)Strongly Disagree
___						
___						
___						
___						
___						